



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,837	06/19/2001	Bijoyendra Nath	SEA9774 (30874.106USU1)	2478
36733	7590	06/13/2006	EXAMINER	
SEAGATE TECHNOLOGY LLC INTELLECTUAL PROPERTY DEPT./ MAIL STOP NRW-097 7801 COMPUTER AVENUE SOUTH BLOOMINGTON, MN 55435			MILLER, BRIAN E	
			ART UNIT	PAPER NUMBER
			2627	

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**MAILED**

**JUN 13 2006**

**Technology Center 2600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/884,837

Filing Date: June 19, 2001

Appellant(s): NATH ET AL.

Brendan J. Hanley  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed January 6, 2005 appealing from the Office action mailed March 12, 2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is incorrect in view of the Examiner's indication of allowance of claims 12-14. A correct statement of the status of the claims is as follows:

This appeal now involves claims 1-9, 21-25.

Claims 10-11, 26 withdrawn from consideration as not directed to the elected species.

Claims 12-14 are now allowed.

Claims 15-20 have been canceled.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows: claims 12-14 have been subsequently indicated as allowable.

**WITHDRAWN REJECTIONS**

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. The 35 U.S.C. § 102 (b) anticipated rejection of claims 12-14 of Chapin et al.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct, aside from claims 12-14 withdrawn from Appeal due to their being indicated as now allowable in view of Appellants' enclosed arguments.

**(8) Evidence Relied Upon**

5,128,822

Chapin et al

7-1992

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-9, 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Chapin et al (US 5,128,822). (As per claims 1, 21) Chapin et al discloses a "reduced lubricant accumulating" slider, as shown primarily in FIGs. 3j and 5g, including: first 20 and second 22 air bearing surfaces; a center "portion" 52 (air bearing surface, claim 2) (FIG. 3j); first 20' and second 22' streamline control elements located adjacent the trailing edge at least partially between the first/second air bearing surface(s) and the center portion, respectively; wherein the two control

Art Unit: 2627

elements are considered to reduce lubricant accumulation; (as per claim 3 & 22) wherein the slider includes a third 32 and fourth 30 control elements in contact with the first and second ABS, respectively; (as per claim 4) wherein a recessed area 28 is between the first and second ABS; (as per claim 5 & 23) wherein the first and second control elements are raised above the recessed area and are at least equal to the first and second ABS (see FIG. 2b); (as per claim 6) wherein a third air bearing surface 24 such that the first and second ABS are “bridged” by the third ABS; (as per claim 7) wherein the third ABS and the center portion/ABS are positioned at opposite ends of the slider; (as per claim 8) wherein the first and second streamline elements have respective first and second ends, the first end positioned in relation to the center portion/ABS and the second end extends beyond the center/ABS towards the third ABS (as in FIG. 3j); (as per claim 9) wherein the first ends of the first and second control elements conform in shape of the center portion/ABS (see FIG. 3j); (as to claim 24) wherein the third and fourth streamline control elements are less than a height of the first and second ABS (see FIG. 2d); (as per claim 25) wherein the ends of the first and second ABS is connected by a third ABS (25, 24, 27-see FIG. 3j).

**(10) Response to Argument**

A...Appellants' assert on page 5 (of the Brief) that "Chapin does not disclose a 'streamline control element'" and further on page 6 sets forth "In order to give full meaning to 'streamline control element' it is necessary to reference the specification for the meaning of the term. The specification clearly defines 'streamline control element.' The broadest definition of 'streamline control element' would be a feature positioned in a location susceptible to flow stagnation or flow reversal to reduce or eliminate stagnation and/or flow reversal."

In response, the Examiner respectfully disagrees. While Appellant submits this argument presumably for all independent claims, 1, 12 & 21, the term "streamline control element" is only found in claims 1 & 21, while any recitation of "stagnation and/or flow reversal" is only found in claim 12, so it is difficult to focus a response to Appellants' generalized assertion. Regardless, the Examiner maintains that Chapin teaches/discloses the claimed limitations. The Examiner has set forth that the claimed "first streamline element" and "second streamline element" are represented by structures 20' and 22', respectively, in Chapin. The claims do not recite any specific details of these streamline elements that would overcome the projected structures as disclosed by Chapin. While the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. Reading limitations into the claims proposed from the so-called "broadest definition" is not considered proper and the recitation of "stagnation and/or flow reversal" is not commensurate with claims 1 & 21, because such language is simply not recited in these claims, therefore the argument is considered misdirected. Appellant has a separate argument pertaining to the other independent claim 12 regarding this language (see page 11 of the Brief) so it will be addressed appropriately then.

**B...**Appellants' on page 8, submit "Chapin fails to disclose the limitation 'function to reduce lubricant accumulation' in claims 1 and 21, and therefore Chapin can not anticipate claims 1 and 21."

The Examiner again respectfully disagrees. In response to this argument, the Examiner considers this language to be a recitation of an intended use of the claimed invention and must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Further, the term "reduce" is considered to be an unreasonably broad relative term and it wouldn't be possible to ascertain to what degree such lubricant accumulation has been reduced. Still further, there is absolutely no positive recitation of "lubricant" in the claim, so it is not readily apparent where this hypothetical lubricant could or would accumulate to therefore be reduced. Irrespective of this, the Examiner maintains that the first streamline control element 20' and second streamline control element 22' encompass the structure as claimed, and thus facilitate the intended use, i.e., "function to reduce lubricant accumulation." It is further pointed out that Chapin's "streamline control elements" 20', 22' (22' is shown in cross-section in Fig. 2b for example) are considered to encompass this limitation any how, such that the raised design would, at least inherently, reduce lubricant accumulation into recessed channels 30, 32, as the "streamline control elements" directly abut these channels.

**C...**Appellants' contend on page 11 of the Brief, i.e., "II. Rejection of Claims 12-14" that "the Chapin reference does not disclose a 'streamline control means located proximate to the downstream portion of the slider for limiting stagnation and flow reversal." Appellant intends to

invoke 35 U.S.C. § 112, sixth paragraph, with the language “streamline control means...for limiting stagnation and flow reversal.”

In response to this assertion, the Examiner has vacated the rejections of claims 12-14 with respect to Chapin et al. As FIGs. 14-16 were previously elected, the Examiner looks to the structure of the streamline control means represented in Fig. 14 at this time.

As shown by this figure and the corresponding disclosure thereof, the “streamline control means” would necessarily include: “As illustrated, the first streamline control element 1450 has a first end 1452 that is positioned in alignment with the center portion 1130 and a second end 1454 that extends towards the third air bearing surface 1140. Similarly, the second streamline control element 1460 has a first end 1462 that is positioned in alignment with the center portion 1130 and a second end 1464 that extends towards the third air bearing surface 240. In this particular embodiment, the first and second streamline control elements 1450 and 1460 are configured so that they are straight and parallel with each other.” It is also apparent from the figure that first and second streamline control elements 1450 and 1460 are *completely isolated* from any other structure and positioned *only* on the rearward half of the slider within the centrally located negative pressure recessed region. It is acknowledged that the specifically disclosed structure (as set forth above) and corresponding function, i.e., “for limiting stagnation and flow reversal”, encompassed by the recited means-plus-function format of claims 12-14, is not reasonable taught or suggested by Chapin et al.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.



Art Unit: 2627

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



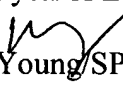
**Brian E. Miller**

**Primary Examiner AU2627**

**May 25, 2006**

Conferees:

/Hoa T. Nguyen/SPE 

/Wayne R. Young/SPE 

/Tianjie Chen/PE 